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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,524	09/19/2000	Jean-Francois Le Pennec	909.0029USU	5842
7590 03/18/2004			EXAMINER	
Harry F Smith Esq Ohlandt Greeley Ruggiero & Perle LLP One Landmark Square 10th Floor Stamford, CT 06901-2682			QUINONES, EDEL H	
			ART UNIT	PAPER NUMBER
			2131	
			DATE MAILED: 03/18/200-	4

Please find below and/or attached an Office communication concerning this application or proceeding.

		1
	Application No.	Applicant(s)
	09/665,524	LE PENNEC ET AL.
Office Action Summary	Examiner	Art Unit
	Edel H Quinones	2131
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be tinwithin the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
<ul> <li>1) Responsive to communication(s) filed on 19 Section 2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under Expression 1.</li> </ul>	action is non-final. ace except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-16 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or		
9) The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ acce		
Applicant may not request that any objection to the one of the Replacement drawing sheet(s) including the correction		
11)☐ The oath or declaration is objected to by the Ex		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign     a) All b) Some * c) None of:     1. Certified copies of the priority documents     2. Certified copies of the priority documents     3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of the priorical section.	s have been received. s have been received in Applicat ity documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)		
1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3</u> .	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	

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#### III. Detailed Action

1. Claims 1-16 are presented for examination.

### Information Disclosure Statement

2. The information disclosure statement filed on 12/26/2000 complies with the provisions of MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered as to the merits.

### Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9-11 recite the limitation "the step of selecting a virus-free certificate authority referring to a first table" in line 2. There is insufficient antecedent basis for this limitation in the claim. For examination purposes it is assumed that these claims are dependent on claim 5.

Claims 9-10 recite the limitation "according to the list of one or plurality of anti-virus programs comprised in the virus-free certificate request" in their second bulleted items. There is

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insufficient antecedent basis for this limitation in the claim. For examination purposes it is assumed that these refer to the list of claim 2.

Claim 12 recites the limitation "the step of selecting a virus-free certificate authority referring to a virus-free certificate relay" in line 2. There is insufficient antecedent basis for this limitation in the claim. For examination purposes it is assumed that this claim is dependent on claim 10.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani et al. (U.S. Patent 6,233,577 and Ramasubramani hereinafter) in view of Parthasarathy et al. (U.S. Patent 6,347,398 and Parthasarathy hereinafter).

In regards to claim 1, Ramasubramani teaches a method for use in a certificate proxy of retrieving from one or a plurality of Certificate Authorities a certificate, the method comprising the steps of:

Receiving a certificate request (i.e. a certificate request is sent to the CMM) (col. 7, lines 43-44);

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Selecting a Certificate Authority having authority to generate a certificate and requesting the certificate to the selected Certificate Authority (i.e. establishing a connection to the appropriate CA via the landnet to obtain new free certificates) (col. 7, lines 55-56);

Receiving from the selected Certificate Authority the certificate (i.e. filling up the certificate database) (col. 7, lines 57).

Ramasubramani does not teach sending back in response to the certificate request the received certificate. However, Ramasubramani teaches that storing the certificates in the local devices instead of a database at the proxy server is old and well known in the art (see col. 7, lines 66-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ramasubramani to include sending back in response to the certificate request the received certificate because this practice is the traditionally accepted practice in the art (see Ramasubramani, col. 7, lines 66-67).

Ramasubramani, however, does not teach that the certificate is a virus-free certificate.

Parthasarathy discloses a system for automatically downloading, verifying, installing, registering and displaying computer software components from computer networks like the Internet or an intranet (col. 1, lines13-15).

Parthasarathy teaches that a digital certificate can be used to verify that a software component is virus-free. In other words, Parthasarathy teaches the use of a virus-free certificate (col. 8, lines 35-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ramasubramani with the teachings of Parthasarathy to use a



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virus-free certificate with the motivation to provide dynamic and truly interactive multimedia to a user (Parthasarathy, col. 3, lines 26-27).

In regards to claim 13, Parthasarathy teaches that the generated virus-free certificate comprises a file signature for certifying that the file is declared virus free by the selected virus-free certificate authority (col. 1, lines13-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ramasubramani with the teachings of Parthasarathy to include a virus-free certificate comprising a file signature for certifying that the file is declared virus free by the selected virus-free certificate authority with the motivation to provide dynamic and truly interactive multimedia to a user (Parthasarathy, col. 3, lines 26-27).

In regards to claim 14, by Applicant's own admission, the main difference between a X.509 Certificate and the virus-free Certificate is that the virus-free Certificate comprises:

- An anti-virus name and level;
- A signature of the file (see Specification, page 15, lines 1-5).

Since these two are not contained in the claim limitations, it can be inferred that the claim limitation are included in the definition of an X.509 Certificate. Therefore, claim 14 stands a being unpatentable over Ramasubramani in view of Parthasarathy.

In regards to claim 15, the claim limitation is a system/processor for executing instructions substantially similar to the method of claim 1, therefore the same rejection applies.

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In regards to claim 16, the claim limitation recites a medium for executing instructions substantially similar to the method of claim 1, therefore the same rejection applies.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy as applied to claim 1 above, in further view of Bakshi et al. (U.S. Patent 6,574,663 and Bakshi hereinafter).

The combination of Ramasubramani and Parthasarathy teaches claim 1 as discussed above.

The combination of Ramasubramani and Parthasarathy however, does not teach that the virus-free certificate request comprises a list of one or a plurality of anti-virus program to execute on the file to determine whether the files is virus-free or not.

Bakshi discloses a system relating to electronic networks (col. 1, lines 6-7). Bakshi teaches that when a new service (i.e. virus-free certificate) is needed in a network, a request may be sent identifying the type of the service (i.e. anti-virus program to execute) and a target device where the service is needed (see Bakshi, col. 6, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Ramasubramani and Parthasarathy with the teachings of Bakshi to include that the virus-free certificate request comprises a list of one or a plurality of anti-virus program to execute on the file to determine whether the file is virus-free or not with the motivation to delegate the service (i.e. virus-free certificate) to an appropriate device so that

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the particular service can be provided in a efficient way to achieve a desired level of performance and to use as few network resources as possible (see Bakshi, col. 3, lines 39-43).

In regards to claim 3, the combination of Ramasubramani and Parthasarathy does not teach that the virus-free certificate request comprises the file for which the virus-free certificate is requested.

Bakshi teaches that when a new service (i.e. virus-free certificate) is needed in a network, a request may be sent identifying the type of the service (i.e. anti-virus program to execute) and a target device (i.e. file) where the service is needed (see Bakshi, col. 6, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Ramasubramani and Parthasarathy with the teachings of Bakshi to include that the virus-free certificate request comprises the file for which the virus-free certificate is requested with the motivation to delegate the service (i.e. virus-free certificate) to an appropriate device so that the particular service can be provided in a efficient way to achieve a desired level of performance and to use as few network resources as possible (see Bakshi, col. 3, lines 39-43).

In regards to claim 4, the combination of Ramasubramani, Parthasarathy and Bakshi does not explicitly disclose that the virus-free certificate request comprises an identification of the file comprising a file identity or an identification of the provider of the file or both.

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However, Bakshi teaches that the request may identify the file (col. 6, lines 55). The Examiner takes Official Notice that using a file identify, or file ID, to identify a file is an old and well known practice in the art.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination of Ramasubramani, Parthasarathy and Bakshi to include that the virus-free certificate request comprises and identification of the file comprising a file identity because this practice is an art-recognized way of efficiently identifying a file.

7. Claims 5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy as applied to claim 1 above, in further view of Scott et al. (U.S. Patent 6,560,717 and Scott hereinafter).

The combination of Ramasubramani and Parthasarathy teaches claim 1 as discussed above.

The combination of Ramasubramani and Parthasarathy however, does not teach that the step of selecting a virus-free Certificate Authority having authority to generate a virus-free certificate for the file comprises the further steps of:

determining whether the virus-free certificate request comprises an identification of a virus-free Certificate Authority or not; and

if the virus-free certificate request does not comprise an identification of a virus-free Certificate Authority, selecting a virus-free Certificate Authority by referring to a table that contains for each file a list of anti-virus programs, each list being associated with a virus-free Certificate Authority.

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Scott discloses a system for load balancing servers in a computer network (col. 1, lines 44-45). Scott teaches that an identification of a Certificate Authority (i.e. application server) is attached to every request in the form of a session ID (col. 4, lines 33-38). Scott also teaches that when an HTTP server receives a request without a session ID (i.e. identification of a virus-free Certificate Authority), the corresponding connection module uses the information from a table to select an application module to use for the new session (col. 4, lines 13-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani and Parthasarathy with the teachings Scott to include determining whether the virus-free certificate request comprises an identification of a virus-free Certificate Authority or not; and if the virus-free certificate request does not comprise an identification of a virus-free Certificate Authority, selecting a virus-free Certificate Authority by referring to a table that contains for each file a list of anti-virus programs, each list being associated with a virus-free Certificate Authority with the motivation to select the most appropriate server (i.e. Certificate Authority) to satisfy the request (see Scott, col. 4, lines 31-32).

In regards to claim 7, the combination of Ramasubramani, Parthasarathy and Scott teaches that the step of selecting a virus-free Certificate Authority having authority to generate a virus-free certificate for the file comprises the further step of determining whether the virus-free certificate request comprises an identification of a virus-free Certificate Authority or not, as discussed for claim 5 above.

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Scott further teaches selecting an application server (i.e. Certificate Authority) identified in a request if the request comprises an identification of application server (col. 4, lines 33-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani, Parthasarathy and Scott to include selecting the virus-free certificate authority identified in the virus-free certificate request whenever the virus-free certificate request comprises an identification of a virus-free certificate authority with the motivation select the most appropriate server (i.e. Certificate Authority) to satisfy the request (see Scott, col. 4, lines 31-32).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy in view of Scott, in further view of Pristriotto et al. (U.S. Patent 6,138,162 and Pristriotto hereinafter).

As discussed for claim 5 above, the combination of Ramasubramani, Parthasarathy and Scott teaches the steps of determining whether the virus-certificate request comprises an identification of a virus-free Certificate Authority or not, and if the virus-free certificate request does not comprise an identification of a virus-free Certificate Authority, selecting a virus-free Certificate Authority by using a table that contains for each file a list of anti-virus programs, each list being associated with a virus-free Certificate Authority.

The combination of Ramasubramani, Parthasarathy and Scott does not teach determining whether the virus-certificate request comprises an identification of a virus-free certificate relay prior to looking up the Certificate Authority in the table.

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Pristriotto discloses a system for redirecting client communication with a destination server via an intermediate proxy server that is connected via a network (col. 1, lines 15-17).

Pristriotto teaches that when a GET request is received by the caching proxy server, the category ID of the request is examined to determine which agent (i.e. relay server) on the caching proxy server should serve the request (col. 7, lines 10-13). In other words, Pristriotto teaches that an ID of a relay server can be included in the request, as an alternative to identifying a destination server (i.e. Certification Authority).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani, Parthasarathy and Scott with the teachings Pristriotto to include determining whether the virus-certificate request comprises an identification of a virus-free certificate relay prior to looking up the Certificate Authority in the table because using a relay server is an art-recognized way of providing a cache of items available on other servers which are presumably slower or more expensive to access (see Pristriotto, col. 2, lines 66-67).

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy in view of Scott in view of Pristriotto, in further view of Clark et al. (U.S. Patent 6,442,588 and Clark hereinafter).

In regards to claim 8, the combination of Ramasubramani, Parthasarathy, Scott and Pristriotto teaches the steps of determining whether the virus-certificate request comprises an identification of a virus-free Certificate Authority or not, and if the virus-free certificate request

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does not comprise an identification of a virus-free Certificate Authority, determining whether the virus-certificate request comprises an identification of a virus-free certificate relay.

The combination of Ramasubramani, Parthasarathy, Scott and Pristriotto does not teach selecting a virus-free Certificate Authority by referring to the virus-free certificate relay if the request comprises a identification of a virus-free certificate relay.

Clark discloses a method of administering a firewall which acts as a filter for determining access to an online service provider network (col. 1, lines 6-8).

Clark teaches selecting a Certificate Authority (i.e. an APS in an online service provider network) by using a relay server (i.e. a third party APS) to route the request to the correct server (col. 5, lines 53-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani, Parthasarathy, Scott and Pristriotto with the teachings Clark to include selecting a virus-free Certificate Authority by referring to a virus-free certificate relay whenever the certificate request comprises an identification of a virus-free certificate relay with the motivation to prevent unauthorized access to a network in a way which can be dynamically updated and maintained (Clark, col. 2, lines 35-37).

10. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy in view of Scott as applied to claim 5 above, in further view of Konno et al. (U.S. Patent 6,078,955 and Konno hereinafter).

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In regards to claim 9, the combination of Ramasubramani, Parthasarathy and Scott teaches claim 5 as discussed above.

The combination of Ramasubramani, Parthasarathy and Scott however, does not teach that the step of selecting a virus-free Certificate Authority by using a table comprises the steps of:

- Determining whether the file is identified or not in the table;
- If the file is identified in the table then selecting a list of anti-virus programs according to the list of anti-virus programs comprised in the certificate request
- Determining whether a Certificate Authority is associated with the selected list;
- If a Certificate Authority is associated with the selected list, selecting the Certificate Authority associated with the selected list.

Konno discloses a method of controlling a computer system including a plurality of computers interconnected by a network and used by a plurality of users through a plurality of types of computers, in which the whole computer system is usable as a computer resource of each user and provides an environment usable by each user without being conscious of the fact that a plurality of types of the computers are involved or the types of the computers included in the system (col. 1, lines 8-16)

#### Konno teaches:

• Determining whether the file is identified or not in the table and if the file is identified in the table then selecting a list of anti-virus programs according to the list of anti-virus programs comprised in the certificate request (i.e. The location of



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the file/program corresponding to the requested job is extracted using the user management information table 202.)

- Determining whether a Certificate Authority is associated with the selected list (i.e. The place of execution of the particular job is determined with reference to the system resource management information file 203);
- If a Certificate Authority is associated with the selected list, selecting the Certificate Authority associated with the selected list (i.e. as required from the environment of the place of execution, the program and the file are loaded into the computer at the place of execution) (see col. 9, lines 20-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani, Parthasarathy and Scott with the teachings Konno to include the steps of:

- Determining whether the file is identified or not in the table;
- If the file is identified in the table then selecting a list of anti-virus programs according to the list of anti-virus programs comprised in the certificate request
- Determining whether a Certificate Authority is associated with the selected list;
   and
- If a Certificate Authority is associated with the selected list, selecting the Certificate Authority associated with the selected list,

with the motivation to free the user from having to be conscious of the physical location where a process will be executed (see Konno, col. 2, lines 13-17).

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In regards to claim 11, the combination of Ramasubramani, Parthasarathy, Scott and Konno teaches selecting a Certificate Authority by referring to a table comprising the step of determining whether the file is identified in the table or not (i.e. The location of the file/program corresponding to the requested job is extracted using the user management information table 202.) (see Konno, col. 2, lines 13-17).

The combination of Ramasubramani, Parthasarathy, Scott and Konno does not teach that if the file is not identified in the table, a default Certificate Authority is selected from the table.

However, selecting a default option when all other options have been exhausted is an old and well known practice in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Ramasubramani, Parthasarathy, Scott and Konno to include that if the file is not identified in the table, a default Certificate Authority is selected from the table with the motivation to insure that files which are not associated to any particular Certificate Authority are also checked for viruses.

11. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani in view of Parthasarathy in view of Scott in view of Konno as applied to claim 9 above, in further view of Clark.

In regards to claim 10, the combination of Ramasubramani, Parthasarathy, Scott and Konno teaches selecting a Certificate Authority by using a table comprising the steps of determining whether the file is identified or not in the table and if the file is identified, selecting a list of anti-virus programs according to the list included in the certificate request, and

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determining whether a Certificate Authority if associated with the selected list, as discussed for claim 9 above.

The combination of Ramasubramani, Parthasarathy, Scott and Konno does not teach that if a Certificate Authority is not associated with the selected list, the system determines whether a certificate relay is associated with the selected list or not, and if a certificate relay is associated with the selected list, the system uses that certificate relay to select a Certificate Authority.

Clark teaches selecting a Certificate Authority (i.e. an APS in an online service provider network) by using a relay server (i.e. a third party APS) to route the request to the correct server (col. 5, lines 53-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the combination of Ramasubramani, Parthasarathy, Scott and Konno with the teachings Clark to include that if a Certificate Authority is not associated with the selected list, the system determines whether a certificate relay is associated with the selected list or not, and if a certificate relay is associated with the selected list, the system uses that certificate relay to select a Certificate Authority with the motivation to prevent unauthorized access to a network in a way which can be dynamically updated and maintained (Clark, col. 2, lines 35-37).

In regards to claim 12, the combination of Ramasubramani, Parthasarathy, Scott and Clark teaches a method of selecting a Certificate Authority by using a table and a certificate relay.

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The combination of Ramasubramani, Parthasarathy, Scott and Clark does not teach that selecting a Certificate Authority by using a certificate relay and a table comprises selecting a Certificate Authority by using a second table in the certificate relay, the second table comprising for each file a list of anti-virus programs, each list being associated with a Certificate Authority.

Konno teaches selecting a place of execution (i.e. Certificate Authority) by referring to a table containing a list of programs to be executed for each file (i.e. The location of the file/program corresponding to the requested job is extracted using the user management information table 202. The place of execution of the particular job is determined with reference to the system resource management information file 203. At the same time, as required from the environment of the place of execution, the program and the file are loaded into the computer at the place of execution (see col. 9, lines 20-37).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Ramasubramani, Parthasarathy and Scott with the teachings of Konno to include that selecting a Certificate Authority by using a certificate relay comprises selecting a Certificate Authority by using a second table in the certificate relay, the second table comprising for each file a list of anti-virus programs, each list being associated with a Certificate Authority with the motivation to free the user from having to be conscious of the physical location where a process will be executed (see Konno, col. 2, lines 13-17).

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# Other Prior Art Made of Record

- 12. A. Khidekel et al (U.S. Patent No. 6,636,975) discloses accessing a secure resource using certificates bound with authentication information;
- B. da Silva et al. (U.S. Patent No. 6,564,320) discloses local hosting of digital certificate services; and
- C. Kusuda. (U.S. Patent No. 6,567,848) discloses a system for coordinating communication between a terminal requesting connection with another terminal while both terminals accessing one of a plurality of servers under the management of a dispatcher.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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#### Points of Contact

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edel H. Quiñones whose telephone number is 703-305-8745. The examiner can normally be reached on M-F (8:00AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Edel H. Quiñones
Patent Examiner

Technology Center 2100

March 09, 2004

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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